§ 160.077-2

(2) Manufacturers of commercial hybrid PFD's to provide a user's manual.

[CGD 78-174, 50 FR 33928, Aug. 22, 1985, as amended by CGD 78-174, 60 FR 2486, Jan. 9, 1995]

§ 160.077-2 Definitions.

- (a) *Commandant* means the Chief of the Lifesaving and Fire Safety Division, Marine Safety and Environmental Protection. Address: Commandant (G-MSE-4), U.S. Coast Guard Headquarters, 2100 Second Street SW., Washington, DC 20593-0001.
- (b) Commercial hybrid PFD means a hybrid PFD approved for use on commercial vessels identified on the PFD label.
- (c) *First quality workmanship* means construction which is free from any defect materially affecting appearance or serviceability.
- (d) *Hybrid PFD* means a personal flotation device that has at least one inflation chamber in combination with inherently buoyant material.
- (e) *Inflation medium* means any solid, liquid, or gas, that, when activated, provides inflation for buoyancy.
- (f) Inspector means an independent laboratory representative assigned to perform duties described in §160.077-23.

- (g) *PFD* means a personal flotation device of a type approved under this subpart.
- (h) Recreational hybrid PFD means a hybrid PFD approved for use on a recreational boat as defined in 33 CFR 175.3.
 - (i) [Reserved]
- (j) Reference vest means a model AK-1, adult PFD; model CKM-1, child medium PFD; or model CKS-2, child small PFD, meeting the requirements of subpart 160.047 of this chapter, except that, in lieu of the weight and displacement values prescribed in Tables 160.047-4(c)(2) and 160.047-4(c)(4), each insert must have the minimum weight of kapok and displacement as shown in Table 160.077-2(j). To achieve the specified volume displacement, front and back insert pad coverings may be larger than the dimensions prescribed by §160.047-1(b) and the width of the front fabric envelope and height of the back fabric envelope may be increased to accommodate a circumference no greater than 1/4" larger than the filled insert circumference. As an alternative, unicellular plastic foam inserts of the specified displacement and of an equivalent shape, as accepted by the Commandant, may be substituted for kapok inserts.

TABLE 160.077-2(J)—REFERENCE VEST MINIMUM KAPOK WEIGHT AND VOLUME DISPLACEMENT

Reference PFD type	Front insert (2 each)		Back insert	
	Minimum kapok weight g (oz)	Volume displace- ment N (lb)	Minimum kapok weight g (oz)	Volume displacement N (lb)
Devices for adults, weighing over 40 kg (90 lb):				
Type II, III, and V Recreational Devices for youths, weighing 23–40 kg (50–90 lb):	234 (8.25)	40±1 (9.0±0.25)	156 (5.5)	27±1 (6.0±0.25)
Type I	184 (6.5)	31±1 (7.0±0.25)	170 (6.0)	30±1 (6.5±0.25)
Type II, III, and V ¹	156 (5.5)	26±1 (5.75±0.25)	149 (5.25)	24±1 (5.5±0.l25)
Type I	128 (4.5)	21±1 (4.75±0.25)	156 (5.5)	30±1 (6.5±0.25)
Type II	100 (3.5)	17±1 (3.75±0.25)	135 (4.75)	22±1 (5.0±0.25)

¹ Both Recreational and Commercial.

- (k) Second stage donning means adjustments or steps necessary to make a PFD provide its intended flotation characteristics after the device has been properly donned and then inflated.
- (l) SOLAS lifejacket, in the case of a hybrid inflatable PFD, means a PFD

approved as meeting the requirements for lifejackets in the 1983 Amendments to the International Convention for the Safety of Life at Sea, 1974 (SOLAS 74/ 83), in addition to the requirements of this subpart.

[CGD 78–174, 50 FR 33928, Aug. 22, 1985, as amended by CGD 78-174A, 51 FR 4351, Feb. 4, 1986; CGD 88-070, 53 FR 34536, Sept. 7, 1988. Redesignated and amended by CGD 78-174, 60 FR 2486, Jan. 9, 1995; 60 FR 7131, Feb. 7, 1995; CGD 95-072, 60 FR 50466, Sept. 29, 1995; CGD 96-041, 61 FR 50733, Sept. 27, 1996]

§ 160.077-3 Required to be worn.

- (a) A Type V hybrid PFD may be used to meet the Coast Guard PFD carriage requirements of subpart 25.25 of this chapter, and 33 CFR part 175, only if the PFD is used in accordance with any requirements on the approval label. PFDs marked "REQUIRED TO BE WORN" must be worn whenever the vessel is underway and the intended wearer is not within an enclosed space.
- (b) If hybrid PFD's with the marking "REQUIRED TO BE WORN" are not worn under the conditions stated in paragraph (a) of this section, other approved PFD's will have to be provided to comply with the applicable carriage requirements in 33 CFR part 175 and subpart 25.25 of this chapter.
- (c) The following PFD's must be marked "REQUIRED TO BE WORN" as specified in § 160.077-31:
- (1) Each Type V recreational hybrid PFD.
- (2) Each Type V commercial hybrid

[CGD 78-174, 50 FR 33928, Aug. 22, 1985. Redesignated and amended by CGD 78-174, 60 FR 2486, Jan. 9, 1995]

§ 160.077-4 Type.

- (a) A hybrid PFD that successfully passes all applicable tests may be approved as a Type I, II, III, or V for various size ranges of persons weighing over 23 kg (50 lb), as Type I or II for persons weighing 14-23 kg (30-50 lb) or as Type I or II for other sizes. A Type V PFD has limitations on its approval.
- (b) The approval tests in this subpart require each Type V hybrid PFD to have at least the same performance as a Type I, II, or III $\ensuremath{\mathsf{PFD}}$ for adult and youth sizes or Type I or II PFD for child sizes.
- (c) A hybrid PFD may be approved for use on recreational boats, commer-

cial vessels or both if the applicable requirements are met.

[CGD 78-174, 60 FR 2486, Jan. 9, 1995]

§ 160.077-5 Incorporation by reference.

- (a) Certain materials are incorporated by reference into this subpart with the approval of the Director of the Federal Register. The Office of the Federal Register publishes a table, 'Material Approved for Incorporation by Reference," which appears in the Finding Aids section of this volume. In that table is found the date of the edition approved, citations to the particular sections of this part where the material is incorporated, addresses where the material is available, and the date of approval by the Director of the Federal Register. To enforce any edition other than the one listed in the table, notice of the change must be published in the FEDERAL REGISTER and the material made available to the public. All approved material is on file at the Office of the Federal Register, Washington, DC 20408, and at the U.S. Coast Guard, Lifesaving and Fire Safe-Division (G-MSE-4), Washington, DC 20593.
- (b) The materials approved for incorporation by reference in this subpart

AMERICAN SOCIETY FOR TESTING AND MATE-RIALS (ASTM)

100 Barr Harbor Drive, West Conshohocken, PA

ASTM B 117-97, Standard Practice for Operating Salt Spray (Fog) Apparatus— 160 077-11

ASTM D 751-95, Standard Test Methods for

Coated Fabrics—160.077–19
ASTM D 1434–82 (1988), Standard Test
Method for Determining Gas Permeability Characteristics of Plastic Film and Sheeting-160.077-19

FEDERAL STANDARDS

- In Federal Test Method Standard No. 191 the following test methods:
- (1) Method 5100, Strength and Elongation, Breaking of Woven Cloth; Grab Method.
- (2) Method 5132, Strength of Cloth, Tearing; Falling-Pendulum Method.
- (3) Method 5134, Strength of Cloth, Tearing; Tongue Method.
- (4) Method 5804.1, Weathering Resistance of Cloth; Accelerated Weathering Method.
- (5) Method 5762, Mildew Resistance of Textile Materials; Soil Burial Method.
- Federal Standard No. 751, Stitches, Seams, and Stitching.